



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,872	11/12/2003	LeNoir E. Zaiser	2173.2005-001	6736

7590 09/14/2007
Rodney D. Johnson. Esq.
R.D. Johnson & Associates, P.C.
70 Walnut Street
Wellesley Hills, MA 02481

EXAMINER

PATEL, NIHIR B

ART UNIT	PAPER NUMBER
----------	--------------

3772

MAIL DATE	DELIVERY MODE
-----------	---------------

09/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/706,872

Applicant(s)

ZAISER ET AL.

Examiner

Nihir Patel

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05.24.2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 11-14 and 21-41 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 12 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-41 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 11, 13, 14, 21-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Dearman et al. (US 5,241,955).
3. As to claim 1, Dearman teaches a breathing apparatus that comprises a delivery valve assembly 12 (see figure 1), comprising a delivery outlet (see figure 1) and a delivery valve member movable within the delivery valve assembly 24, 50 (see figure 1) between a closed position and an open position for controlling flow of a gas through the delivery outlet (see figure 1); a timing gas chamber 42 (see figure 1) for receiving gas, gas pressure within the timing gas chamber controlling the movement on the delivery valve member (see column 3), and a user adjustment system 31 (see figure 1 and column 2 lines 50-60) for selectively controlling the amount of time required for the gas to sufficiently fill the timing gas chamber to control the length of time that the delivery valve member is in the opened positioned.
4. As to claim 3, Dearman teaches a breathing apparatus that comprises a delivery valve assembly 12 (see figure 1), comprising a delivery outlet (see figure 1) and a delivery valve member movable within the delivery valve assembly 24, 50 (see figure 1) between a closed position and an open position for controlling flow of a gas through the delivery outlet (see figure 1); a timing gas chamber 42 (see figure 1) for receiving gas, gas pressure within the timing gas

chamber controlling the movement on the delivery valve member (**see column 3**), and a user adjustment system **31** (**see figure 1 and column 2 lines 50-60**) for selectively controlling the amount of time required for the gas to sufficiently fill the timing gas chamber to control the length of time that the delivery valve member is in the open position, the adjustment system including a volume adjustment device for selectively adjusting the volume of the timing gas chamber (**see column 3**).

5. **As to claim 4**, Dearman teaches an apparatus wherein the volume adjustment device includes an adjustable piston (**see figure 1**).

6. **As to claims 21 and 23**, Dearman teaches an apparatus that further comprises a user adjustment system that includes an adjustment member that can be selectively positioned by the user (**see figure 1 and column 2 lines 50-60**).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims **11, 13, 14, 26, 27 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dearman et al. (US 5,241,955).
10. As to **claims 11 and 13**, Dearman teaches a method step of providing a delivery valve assembly **22** comprising a delivery outlet (**see figure 1**) and a delivery valve member **24, 50** (**see figure 1**) movable within the delivery valve assembly between a closed position and an open position for controlling flow of a gas through the delivery outlet (**see figure 1**); receiving gas in a timing chamber **42**, gas pressure within the timing gas chamber controlling the movement of the delivery valve member; and controlling the amount of time required for the gas to sufficiently fill the timing gas chamber with an adjustment system **31** to control the length of time that the delivery valve member is in the open position, the adjustment system including a volume adjustment device for selectively adjusting the volume of the timing gas chamber.
11. As to **claims 14 and 27**, Dearman teaches a method step wherein the adjustment member is an adjustable piston (**see figure 1**).
12. As to **claims 26 and 29**, Dearman teaches a method step wherein the user adjustment system includes an adjustment member that can be selectively positioned by a user (**see column 2 lines 50-60**).

The claimed method steps would have been obvious because they would have resulted from the user of the device of Dearman.

13. Claims **22, 25, 28 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dearman et al. (US 5,241,955) in view of Perkins (US 4,705,034).
14. As to **claims 22, 25, 28 and 31**, Dearman discloses the applicant's invention as claimed with the exception of providing a delivery valve member that is a flexible membrane. Perkins

Art Unit: 3772

discloses an apparatus that does provide a delivery valve member that is a flexible membrane (see column 9 lines 45-60), which is well known in the art. Therefore it would have been obvious to modify Dearman's invention by providing a delivery valve member that is a flexible membrane as taught by Perkins.

15. Claims **24 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dearman et al. (US 5,241,955) in view of Smith et al. (US 6,647,983).

16. As to claims **24 and 30**, Dearman teaches the applicant's invention as claimed with the exception of providing an adjustment system that includes an orifice member having more than one orifice, each of a different size, which can be selectively positioned for selecting the flow rate of the gas into the timing gas chamber. Smith discloses an apparatus that does provide an adjustment system that includes an orifice member having more than one orifice, each of a different size, which can be selectively positioned for selecting the flow rate of the gas into the timing gas chamber, which is well known in the art. Therefore it would have been obvious to modify Dearman's invention by providing an adjustment system that includes an orifice member having more than one orifice, each of a different size, which can be selectively positioned for selecting the flow rate of the gas into the timing gas chamber as taught by Smith.

Allowable Subject Matter

17. Claims **32-41** are allowed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nihir Patel whose telephone number is (571) 272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (571) 272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit 3772

A handwritten signature in black ink, appearing to read "Nihir Patel", with a stylized flourish at the end.

Nihir Patel